

STATE OF NORTH CAROLINA

Approved Classification: _____

OFFICE OF STATE PERSONNEL

Effective Date: _____

Analyst: _____

POSITION DESCRIPTION FORM (PD-102R-92)

(This Space for Personnel Dept. Use Only)

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|---|--|-------------------------|
| 1. Present Classification Title of Position Transportation Technical Aide II | 7. Pres. 15 Digit Position No. | Prop. 15 Digit Pos. No. |
| 2. Usual Working Title of Position Survey Assistant | 8. Department, University, Commission, or Agency Transportation | |
| 3. Requested Classification of Position Transportation Technical Aide II | 9. Institution & Division Highways | |
| 4. Name of Immediate Supervisor | 10. Section and Unit Highway Design \ Location & Surveys | |
| 5. Supervisor's Position Title & Position Number Transportation Engineering Supervisor I | 11. Street Address, City and County 1020 Birch Ridge Rd., Raleigh, NC | |
| 6. Name of Employee | 12. Location of Workplace, Bldg. And Room No. Century Center, Bldg. B | |

I. A. Primary Purpose of Organizational Unit:

The primary purpose of Location & Surveys is to serve as support services in providing engineering analysis, mapping and other data for the design of transportation facilities and the acquisition of property for the construction of transportation facilities.

B. Primary Purpose of Position:

This is an entry level position requiring employee to perform a variety of assignments under the supervision of higher level survey technicians and/or engineers as part of an engineering survey group. The primary purpose of this position is survey assistant on a Location & Surveys survey crew, involved in field work for preparation of plan sheets for TIP projects, hydraulic surveys, setting and location of photogrammetric controls, and Global Positioning System (GPS) field work. Other duties may involve some survey instrument operation and /or CADD and computer work.

C. Work Schedule:

8:00 AM to 4:30 PM, or some variation thereof, Monday through Friday, for a total of 40 hours per work week. Flex time or seasonally variable work hours may be used in individual offices based upon needs and circumstances.

D. Change in Responsibilities or Organizational Relationship:

The duties of this position have expanded to include additional responsibilities in the operation of CADD and GPS equipment.

II. A. DESCRIPTION OF RESPONSIBILITIES AND DUTIES: Method Used (Check One) Order of importance X__
Sequential order _____

Place an asterisk (*) next to each essential function. (See instructions for complete explanation.) Please note percentage of time for each function.

- | No. | % | |
|-----|----|---|
| 1 | 10 | Safety - Maintain safe work attitude, use required personal protective wear items, be familiar with and use safe operating procedures. Keep alert and notify others of potential safety hazards. Place signs and other traffic control devices in a work zone as directed by others. Serve as flagger in activities requiring traffic control. |
| 2 | 75 | Survey Assistant - Place targets over existing points to be used in measuring angles and distances for collecting data and in field stake out of alignments, rights of way and easements. Use prism pole to assist in the horizontal and vertical locations of topographic and planimetric features and to determine accurate point placement during stakeout. This requires some degree of responsibility and decision making in that erroneous or incorrect use of prism pole may result in additional work by others. Sets survey points accurately as directed by the instrument operator. Use brush ax and/or chain saw to clear line for obtaining data and for project stakeout. Measures features to be classified on aerial photography. Places terrestrial targets for aerial photography. Is trained in the basic use of electronic survey instruments to obtain data for digital terrain models (DTM) and other engineering survey data as directed. Assists in reconnaissance of property corners, using deeds, plats, and tax maps, for the purpose of property surveys. Operates computers, calculators and CADD workstations as directed by higher level technicians and engineers to obtain information, edit electronic data files, and prepare and edit electronic drawings. Prepares property appraisal data reports and utility pole data reports under close supervision. Assists in obtaining GPS data by setting control monuments and operating the GPS Electronic equipment during field operations. |
| 3 | 05 | Court House Research - This employee assists in researching public records to determine ownership of properties along the survey route and in obtaining copies of deeds and other documents that show ownership and descriptions of affected properties. |
| 4 | 05 | Maintain and supply vehicles - Maintains field vehicles on a daily basis and loads necessary survey supplies for daily field work activities. Operates survey vehicle. |
| 5 | 05 | Other Duties - as defined by higher level technicians or engineers. |

II. B. OTHER POSITION CHARACTERISTICS: (cont.)

1. Accuracy Required in Work:

Accuracy to meet minimum standards for the task as set by NCDOT and the Location and Surveys Unit.

2. Consequence of Error:

Erroneous work can result in additional time for others to edit or correct, or can result in additional field work. Uncorrected data can result in poor design based upon incorrect information and can increase project costs by extending the time in gathering field data or delay plan sheet preparation by other units.

3. Instructions Provided to Employee:

Receives verbal and/or written instruction from higher level technicians and/or engineers along with on the job training on a daily basis.

4. Guides, Regulations, Policies and References Used by Employee:

NCDOT Workplace Safety Manual; NCDOT and FHWA Manuals on Uniform Traffic Control Devices (MUTCD);
Uses applicable Unit standards and procedures for the task at hand.

5. Supervision Received by Employee:

Receives direct daily supervision from higher level technicians and/or engineers. All work is checked thoroughly by higher level engineers and technicians using standard engineering and surveying practices and procedures.

6. Variety and Purpose of Personal Contacts:

Has daily personal contact within the field survey group. Incidental contact with the public and other agency workers.

7. Physical Effort:

This is primarily an outside position. Outside work may involve any type of weather or geographic conditions, at any time of day. Physical labor such as traversing rough terrain, using bush ax or chain saw for clearing brush, or carrying heavy or cumbersome equipment is typical. Operation of a motor vehicle is required to reach job site and to move personnel and equipment on the job site.

8. Work Environment and Conditions:

Perform outside work in field conditions where heat, cold, animals, insects, bees, snakes, poison plants and proximity to moving vehicles may be encountered. Some work may be in a controlled office environment. Employee may also be required to confront irate citizens.

9. Machines, Tools, Instruments, Equipment and Materials Used:

Field use of survey equipment such as GPS receivers, tripods, plumb bobs, measuring tapes, bush axes, and chain saws may be required. Use of computers, CADD workstations, hand-held calculators, triangles, scales, and other hand-drafting or measuring equipment; manuals; large photographs and plan sheets; telephone. Operation of motor vehicles is required in performance of duties.

10. Visual Attention, Mental Concentration and Manipulative Skills:

Operation of motor vehicles, chain saws, and axes requires visual attention, mental concentration, and manipulative skills for accuracy and/or safety.

11. Safety for Others:

Has responsibility for staying alert and observing potential safety hazards and informing or warning others. Observes and directs traffic through the work zone. Places signs and other traffic control devices as directed by the field supervisor.

12. Dynamics of Work:

Advances in technologies in instrumentation and software bring about new procedures which the survey assistant must learn and become proficient in.

III. KNOWLEDGE, SKILLS & ABILITIES AND TRAINING & EXPERIENCE REQUIREMENTS:

A. Knowledge's, Skills and Abilities:

Employee must have the ability to receive and follow verbal and written instructions. Mathematical skills using algebra, geometry and trigonometry. This position requires good physical conditioning and requires the use of the senses of sight, feel and hearing.

B. 1. Required Minimum Training:

Graduation from a two year college with a degree in Civil Engineering or Survey Technology.

2. Additional Training/Experience:

Additional training as needed will be supplied by supervisor and Location & Surveys Unit or NCDOT Training Personnel.

3. Equivalent Training and Experience:

Graduation from high school with course work in mathematics and two years of progressive transportation technician experience; or an equivalent combination of training and experience.

C. License or Certification Required by Statute or Regulation:

NC Driver's License is required.

IV. CERTIFICATION: Signatures indicate agreement with all information provided, including designation of essential functions.

Supervisor's Certification: I certify that (a) I am the Immediate Supervisor of this position, that (b) I have provided a complete and accurate description of responsibilities and duties and (c) I have verified (and reconciled as needed) its accuracy and completeness with the employee.

Signature _____ Title: _____ Date: _____

Employee's Certification: I certify that I have reviewed this position description and that it is a complete and accurate description of my responsibilities and duties.

Signature _____ Title: _____ Date: _____

Section or Division Manager's Certification: I certify that this position description, completed by the above named immediate supervisor, is complete and accurate.

Signature _____ Title: _____ Date: _____

Department Head or Authorized Representative's Certification: I certify that this is an authorized, official position description of the subject position.

Signature _____ Title: _____ Date: _____